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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,419	05/15/2006	Jozef Pieter Van Gassel	NL 031339	7897
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)				
Office Action Summary		10/579,419	VAN GASSEL, JOZEF PIETER				
		Examiner	Art Unit				
		DIONNE H. PENDLETON	2627				
Period fo	The MAILING DATE of this communication app r Reply	ears on the cover sheet with the c	orrespondence ad	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)[\]	Responsive to communication(s) filed on <u>31 Au</u>	iaust 2000					
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	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
4)🖂	)⊠ Claim(s) <u>1,2,6,8-10 and 12-19</u> is/are pending in the application.						
•	4a) Of the above claim(s) is/are withdrawn from consideration.						
	Claim(s) is/are allowed.						
•	6)⊠ Claim(s) <u>1,2,6,8-10 and 12-19</u> is/are rejected.						
	Claim(s) is/are objected to.						
•	Claim(s) are subject to restriction and/or	election requirement					
0)[	olalin(s) are subject to restriction and/or	cicculon requirement.					
Applicati	on Papers						
9)☐ The specification is objected to by the Examiner.							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	nder 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ul>							
* See the attached detailed Office action for a list of the certified copies not received.							
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	4)	te				

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1, 2, 6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US Patent Number 6865627, hereinafter Wu'627), in view of Wu (US Patent Number 6535470, hereinafter Wu'470), and further in view of Nguyen et al (US Patent Number 7373413).

### Regarding claims 1 and 8,

Wu'627 discloses: A playback device (figure 1, item 176) for playback of a media stream from a storage medium (column 6, lines 17-21), the device comprising reading means for reading at least a part of the media stream (column 4, lines 23-49), a buffer (figure 2, item 210) for holding the part of the media stream (columns 6 & 7, lines 61-67 & 1-12), a playback unit (figure 2, item 204) for consuming the part of the media stream from the buffer (column 6, lines 61-67) at a predefined rate (column 7, lines 13-25), and control means for controlling the reading of the media stream from the storage medium (column 7, lines 13-25), filling of the buffer during a buffer filling period ("304" in fig. 3) and the playback of the media stream (columns 6 & 7, lines 61-67 & 1-12), wherein the control means comprise means for retrieving playback mode control information

(column 7, lines 26-54), and means for calculating a buffer refilling time depending on the playback mode control information (column 7, lines 26-54).

Wu'627 fails to specifically disclose that the playback control information is retrieved from a storage area on the storage medium.

**Wu'470** teaches that the constant angular velocity (CAV), interpreted as corresponding at least in part to "playback mode control information", and used for establishing data playback/transfer rate, is retrieved from the ATIP field of the disk, and is further use for initializing first and second buffers (142-1, 142-2), see column 12, lines 35-53, and column 13, lines 10-15.

It would have been obvious for one of ordinary skill in the art at the time of the invention to alter the device of Wu'627 so as to provide playback control information in a storage area of the storage medium as is taught by Wu'470, for the purpose of rotating the storage medium at a constant angular velocity which is specific to the type of storage medium in use and well as specific to the manufacturing specification of the storage medium.

The combined disclosures of Wu'627 and Wu '470, fail to expressly disclose that the control means are arranged for calculating the buffer filling period depending on information about a location of the part of the media stream on the storage medium.

**NGUYEN** teaches controlling a buffer filling period such that data is transmitted to the buffer during a shortened buffer filling period, which is shorter than the normal buffer filling period (column 3, lines 26-34). Additionally, column 3, lines 27-34, lines 37-

39 and lines 53-55, disclose a control unit for controlling said buffer filling period.

Alternatively, column 3, lines 41-55 disclose that the control unit "335", will lengthen the buffer filling period by switching to the normal transmit rate, once a predetermined number of frames (i.e., location of the part of the media stream) has been transmitted.

It would have been obvious for ordinary skill in the art at the time of the invention to alter Wu'627 and Wu '470 per the teachings of Nguyen, thereby altering the rate at which the buffer is filled as a function of the location of the part of the media stream, thereby minimizing the delay which would otherwise be encountered at the start up of a media stream or even when selecting a different starting point along the media stream.

### Regarding claim 2,

Wu'627 teaches that the means for retrieving playback mode control information are arranged for retrieving characteristic point information (columns 9 & 10, lines 43-67 & 1-13; figure3) and the means for calculating the buffer refilling time are arranged for calculating the buffer refilling time depending on the characteristic point information (column 7, lines 26-54).

## Regarding claim 6,

Nguyen disclose the features of base claim 3, but fail to specifically teach that the control means are arranged for calculating the buffer filling period depending on information about the location of a disk head (column 3, lines 26-34 discloses altering the buffer filling period depending upon the startup of a media stream, thus interpreted

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as corresponding to positioning of a disk head at the beginning of a data section in a storage medium, for the purposes of beginning reproduction of said data stream).

## Regarding claim 9,

Nguyen discloses: The control means are arranged for calculating the buffer filling period depending on information concerning retrieval of the media stream (column 3, lines 26-34).

# Regarding claim 10,

Wu'627 teaches a computer program product which program is operative to cause a processor to perform the method (abstract).

2. Claims 12, 13, 14, 15, 16, 17, 18 and 19 are rejected under 35 U.S.C. 103(A) as being unpatentable over Wu (US Patent Number 6865627, hereinafter Wu'627), in view of Wu (US Patent Number 6535470, hereinafter Wu'470), and Nguyen et al (US Patent Number 7373413) as applied to claims 1 and 8 above, and further in view of TADA (US Patent 7,194,191).

# Regarding claims 12 and 16,

The combined disclosures of Wu'627, Wu '470 and Nguyen disclose the playback device of claim 1. They fail, however, to expressly disclose storing file system information stored on the storage medium in a memory of the playback device, the file

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system information including the information about the location of the part of the media stream on the storage medium.

TADA teaches a playback device comprising a controller ("10" in figure 1) configured to store file system information stored on the storage medium in a memory ("20" in figure 1) of the playback device, the file system information including the information about the location of the part of the media stream (see "allocation descriptor" in column 3:34-37) on the storage medium.

It would have been obvious for one of ordinary skill in the art at the time of the invention to alter any one of Wu'627, Wu '470 and Nguyen, per the teachings of TADA such that the device stores information about the locations of part of a media stream stored on the storage medium, thereby showing the existing position of each of a plurality of areas in the storage medium.

### Regarding claims 13 and 17,

Tada teaches storing file system information stored on the storage medium in a memory of the playback device, the file system information including the information about the location of the part of the media stream (see "allocation descriptor" in column 3:34-37) on the storage medium and the information about the position of the disk head (see "head position" in column 3:42-45).

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## Regarding claims 14 and 18,

Tada teaches in **column 11: 31-32**, the simultaneous playback of a first media stream while recording a second media stream.

### Regarding claims 15 and 19,

Tada teaches that the controller is configured to use the buffer refilling time to allow the playback device to read or write data from or onto the storage medium when the storage medium is not needed for a playback process.

### Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. **Claim 10** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

A claim directed to a computer program itself is non-statutory because it is not:

A process occurring as a result of executing the program, or

A machine programmed to operate in accordance with the program, or

A manufacture structurally and functionally interconnected with the program in a manner which enable the program to act as a computer component and realize its functionality, or

A composition of matter.

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See MPEP § 2106.01. Data structures not claimed as embodied in computer readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

## Response to Arguments

4. Applicant's arguments with respect to claims finally rejected in the Non-Final rejection mailed 5/29/2009 have been considered but are moot in view of the new ground(s) of rejection.

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### Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE - MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIONNE H. PENDLETON whose telephone number is (571)272-7497. The examiner can normally be reached on 10:30-7:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dionne H Pendleton/ Examiner, Art Unit 2627

/Thang V. Tran/ Primary Examiner, Art Unit 2627